


three criteria must be met to establish a *prima facie* case of obviousness. M.P.E.P. §2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to achieve the claimed invention. *Id.* Second, there must be a reasonable expectation of success. *Id.* Third, the prior art must teach or suggest all the claim limitations. *Id.*

Applicant respectfully submits that neither *Wakai* nor *Takenouchi*, alone or in combination, teach, disclose or reasonably suggest the claimed invention. And even assuming, *arguendo*, that the proposed modification discloses the claimed invention, there is a lack of suggestion as to why a skilled artisan would use the proposed modification to achieve the unobvious advantages first recognized by the Applicant. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

The Office Action specifically asserts that *Wakai* discloses an inverted staggered TFT having an insulating layer comprising resinous material, while *Takenouchi* discloses a resinous substrate and a resinous layer thereon. Resinous substrates, while used to impart flexibility to a liquid crystal display (LCD), have proven to exhibit poor heat resistance (Page 2, lines 25-29 of Applicant's Specification). In cases of forming the interlayer insulating layer comprising silicon oxide or silicon nitride over the resinous substrate by PCVD, the resinous substrate is often damaged because it is generally heated to temperatures of 300°C or more. Consequently, it is preferable to employ a lower temperature process on the resinous substrate during the formation of the TFT thereon.

The present invention solves this problem by forming a resinous interlayer insulating layer by a coating method at lower temperatures than those employed by PCVD, and without imparting damage to the resinous substrate. Consequently, the resinous interlayer insulating layer as provided in the present invention is preferable for the resinous substrate in view of the TFT forming process. Moreover, the resinous interlayer insulating layer has an additional advantage of providing the top surface of the TFT with a planarized surface, in a similar manner in which the resinous layer placed over the resinous substrate provides the bottom




surface of the TFT with a planarized surface. In addition, where a device is subject to bending, placing both a resinous interlayer insulating layer and a resinous layer on the resinous substrate is advantageous since these layers effectively reduce the undesirable effects of bending on the TFT due to their high flexibility in comparison to other insulating materials.

Thus, in failing to recognize the criticality of using a resinous substrate provided with a resinous layer and a resinous interlayer insulating layer for reducing the harmful effects of bending on the TFT, *Wakai* and *Takenouchi* are both inadequate for failing to render the present invention obvious. As a result, the Applicant respectfully requests that the §103(a) rejection of the pending claims be reconsidered and withdrawn in view thereof.

For all of the above reasons, it is respectively asserted that claims 1-8 and 11-37 are now in proper condition for allowance. Reconsideration of these claims in view of the above comments is respectively requested. If the Examiner feels that any further discussions would be beneficial in this matter, it is requested that the undersigned be contacted.

Respectfully submitted,  
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